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**CXIII. *A Letter to George Lewis Scot, Esquire, concerning the present Increase of the People in Britain and Ireland : From William Brakenridge, D. D. Rector of St. Michael Bassishaw, London, and F. R. S.***

Dear Sir,

Read Dec. 9. <sup>1756.</sup> **Y**OUR favourable acceptance of my two former letters, concerning the number of people in this city, and throughout England, has encouraged me to add this as a supplement to them ; in which if the observations are not so agreeable as could be wished, they may perhaps be useful in our reasoning upon matters of Government, and help us to discover some things that may be wrong, or inconsistent with the public utility.

From the proportion of births and burials in England, and the number of people found, you have already seen what the annual increase might be ; which appeared so small, that I was in some doubt whether there was any increase at all, after the deduction of our losses by our ordinary commerce at Sea, our wars, and emigrations to our Colonies. However, supposing, that there was an annual increase, I shewed the method of computing it, after any number of years ; which sometimes may be of use in considering the increase of mankind in general. But now, having considered this subject farther, I think it may be proved, that there is no increase at

all from both our British Isles, after the deduction of our losses; and that in England, taken by itself, the natives would be in a decreasing state, if it were not for the supplies from Scotland and Ireland. As this seems to be of some importance to discover, because of its consequence with regard to Policy, and the influence it may sometimes have, I shall endeavour to shew it as plainly, as the present circumstances of things will allow.

Dr. Halley has shewn, from his Table of the Probabilities of life at Breslau, that the number of men able to carry arms in any country, between 18 and 56 years of age, or, as they are called, the fencible men, may be estimated as a fourth part of the whole people, children included. From which it demonstrably follows, that the fourth part of the annual increase will likewise be the increase of the fencible men; and that their increase or decrease will always be in that proportion. And therefore, if in England the annual increase of the people does not exceed 18000, as I have before proved from the proportion of births and burials, and the whole number being six millions, the annual increase of the fencible men will not be above 4500.

But in Scotland and Ireland this increase may be reasonably supposed to be more, in proportion as there are more marriages than in England. And therefore, to avoid any uncertainty in calculation, we will suppose the annual increase in those countries, to be double in proportion. That is, as we have from observation, assumed the births to be to the burials as 112 to 100 at an average through England, we will now allow them in Scotland and  
Ireland

Ireland to be as 124 to 100 ; where the difference, which is the increase, is double to the other, and by which the whole people would be doubled in about 114 years ; which is surely as much as can be supposed. And then, by the method that has been shewn in my last letter, if the people in both countries do not exceed 2,500,000, the annual increase will be found to be 15,000, and the fencible men will be 3750.

From the account given in the Philosophical Transactions, N<sup>o</sup>. 261, the number of people in Ireland, in the year 1696, did not appear to be more than 1,034,000 ; since which time there has been little increase, as I shall presently shew ; and in Scotland they are supposed to be less than 1,500,000 ; and so both together they cannot be reckoned at more than 2,500,000 : and therefore the annual increase of the fencible men cannot possibly be more than 3750, in both countries ; which with those in England will be 8250, for the annual increase in Britain and Ireland, or a little above 8000 men. And no reasonable computation can make them more.

It is true it may be said, that besides this increase, there is a considerable number of Foreigners, who come from all parts of Europe to settle among us, especially at London ; but it may be justly supposed, that they are nearly ballanced by the number that go from hence, to reside in other kingdoms, for the purposes of trade and other considerations. And there cannot be so great an accession of Foreigners, as is commonly imagined ; for they almost all come to this City, and yet it is not in an increasing state, as has been shewn in my first letter, notwithstanding

all its supplies from them, and from Scotland and Ireland.

The number then 8250 may be considered, at the utmost, as the yearly increase of the fencible men; from which all our public losses in our ordinary commerce at Sea, and in our wars by Land and Sea, and by our Colonies, are to be deducted. And it is plain, if in all these ways our losses are annually equal to about 8000 men, there can be no increase at all of our fencible men; and consequently no increase of our people, which must always be in proportion to them; but if our losses are more, we must be in a decreasing state.

To make a just and moderate estimate of our losses it will be proper, that we take fifty or sixty years at an average to avoid any uncertainty. And if we begin at the year 1690, which is 66 years ago, we shall find, that during that time, in our commerce at Sea, and in our wars by Land and Sea, we cannot have lost less than 450,000 men.

To shew this it may be observed, that in all bodies or armies of fencible men, which consist generally of those between 18 and 56 years of age, there dies annually about one in 54, by the natural decrease of life, as appears from Dr. Halley's Table. And therefore, if there are 80000 seamen or more, as is said in Britain and Ireland, the natural decrease, which is not here to be considered, will be about 1480 or 1500 annually. But the number must be much greater that is lost, by the various contingencies of the Sea, by wreck, scurvy, and the inclemency of different climates, &c.; for fewer cannot be supposed to be destroyed by such incidents, than the double

double of those that may be by natural mortality. I think there must be more; for if a ship goes a voyage for a year with an hundred men on board, and returns only with the loss of half a dozen, she is reckoned to have made a healthy voyage, though the loss is above three times what might be expected from natural decrease; that is, though the loss by the Sea only may be considered as double the other. And it often happens, that by sickness there will be much more than this, besides all the other hazards of the Sea. Our ships of war in long cruising have generally a greater consumption of their people: So that our losses by Sea are rather undervalued, when they are estimated to be the double, of what is from the natural decrements of life. And, if this be allowed, the loss by the various contingencies of the Sea will be more than 3000 annually, over and above the number that might die by natural casualties if they were at home; and in 66 years it must be 198,000.

And as to our losses by war at Land and Sea, of our own people, they are commonly reckoned to be 300,000, in all the three French wars, since 1690: But if we abate 50,000 from that number, that we may reason with more certainty, they cannot possibly be less than 250,000; for in all those wars, that taken together were about twenty years, there must be more than 10,000 lost yearly by Land and Sea. And therefore, both by our commerce and wars, from that time mentioned, we have at least lost about 448,000, or 6800 annually. In which are included those who died by fatigue, and other hardships, as well as those in actual Engagements.

And.

And if we add to this, the number that is constantly and secretly drawn from Ireland, for foreign military service and on the account of religion; and likewise those taken from Scotland, for our Regiments in the Dutch service; all which cannot be less than 500 yearly, though some have thought it to be double this, we shall then appear to have lost 7300 annually, since the year 1690. To which if we put the loss of those who go from hence to our Colonies, and other settlements, particularly to Jamaica and the East-Indies; and, last of all, the number we have lost by the use of spirituous liquors; it will be plain, that our whole loss cannot be less but more than 8250 annually; which is at most the yearly increase of our fencible men: And therefore that there has been no increase at all of our people these last 66 years; but rather perhaps a decrease, though it cannot be ascertained with any precision. And there is no avoiding this conclusion, unless it can be shewn, that the annual increment of our fencible men is much greater than 8250; which seems impossible, without proving the number of our people to be more than six millions, and the proportion of births to burials greater than any observations through England have lately made them.

And here it is to be observed, that if there has been no increase during that period of years, the people of England cannot be more than 5,500,000. Because, when they are computed from the number of houses at the year 1710, they do not exceed 5,467,000; and when in my last letter, I supposed there might be some increase, and gave a calculation of it to the present time, that, being added to the  
above,

above, made only about six millions. And therefore the annual increase of fencible men in England is not above 4130, and in both Islands it does not exceed 7900; which being less than what we have allowed above, seems to corroborate what has been said.

Now if this can be proved, as I imagine it has, that there is no increase of our people in Britain and Ireland, because of our losses, we may make this unpleasant reflection, that our country can never be fully peopled, while our losses continue so great as they have been these last sixty years. For it has been shewn in my last letter, that we want one third more people, to be fully inhabited, and which we could conveniently maintain from our own natural produce, if our land was duly cultivated. And it may be farther observed, that as the greatest part of those losses above-mentioned belong to England, because of its much greater trade, and the greater number of its people, it may be considered as in a decreasing state with regard to its natives; and, if it were not supplied from Scotland and Ireland, the decrease would be plainly discovered. For, as the people in England are double to those in both the two other countries, its losses must be in that proportion at least, or about 5300 annually, two-thirds of the whole; which is more than the increase of its fencible men.

In London and Westminster the decrease has been observable from the Bills of Mortality within these last twelve years, as I have shewn in my first letter; but the greatest part of that may, I believe, be attributed to other causes, rather than national losses.

From



From the above calculation we may likewise see, how small the annual increase of fencible men may be in Britain, or perhaps in any other country in Europe. For as that increase in both our Islands does not appear to be more than 8250 but rather less, or about 7000, and the number of our whole people in them is not found to exceed 8,000,000, the annual increase in each million must be less than 1000, or about 987; that is, less than one in a thousand; though we have allowed the increase in Scotland and Ireland to be double in proportion to what it is in England. And from this we may form a good rule, by which we may judge of the increase, or decrease of other nations. For though they may be supposed to increase perhaps faster than we do, by more frequent marriages, the annual increase of their fencible men will not generally much exceed 1000, for every million of people. And therefore, according as their losses by war, or other devastations are fewer, or exceed 1000 fencible men annually, for every million of their people, they are either in an increasing or decreasing state; and for every 1000 men that are lost, there is the increase of a million for one year destroyed; which it were to be wished, that Princes would attend to, in their ambitious schemes, by which they make such havock of mankind.

And hence by the way we may observe, that France cannot be in an increasing state, unless their late encouragement for marriage has had some considerable effect; because if the number of her people, as Sir William Petty and others have reckoned, does not exceed 14,000,000, the annual increase of her  
fencible

fencible men will not be much more than 14,000 : Which number seems to be exhausted during these last 66 years, in her frequent wars, her ordinary commerce at Sea, and emigrations to her Colonies. For all the annual increments put together, in that time, will not make above a million, and the losses cannot be computed at much less. And this is some comfort to us in Britain, that our neighbours, who are rivals to us in trade and power, are not better œconomists of their people than we are ; and that their scheme of Government and superstition will never suffer them to increase, so much as they might reasonably do.

We may in general likewise observe, that in all Europe the annual increase of people must be much less than it was in some former ages. For the advancement of trade in the maritime countries, must greatly augment the loss of their fencible men. In Britain there is one-third of the increase of them destroyed by our concerns at Sea, and in Holland perhaps the whole of it ; and this added to the superstitious celibacy of other nations, must diminish much the increase of people.

The above method of shewing our want of increase, from the losses of our fencible men ; which are always in proportion to the whole body of the people, seems to me to be clear and demonstrative : But the same thing may likewise be conjectured, from the exportation of our corn. For there is as much now sent abroad as was forty years ago, or perhaps more ; besides a great deal of it distilled, which was not formerly done. And if there is the same quantity exported, there must be nearly the same con-

sumption at home, and consequently about the same number of people, unless there is a much greater quantity of land improved. But it seems evident, that if we were in an increasing state, our late improvements of land could not cause such a surplus, over our home-consumption. For there is near about a fifth part, of our whole crop of wheat exported annually. A quantity that shews we want people to consume our natural produce, and that our country is but thinly peopled.

Now, to account for the cause of the want of increase in our British Isles, it seems to be chiefly owing to three things, that operate together. The fashionable humour that greatly prevails, by which above one-third of our people in England above twenty-one years of age are single, occasioned by a variety of circumstances; and to our wars and commerce at Sea, which are rather beyond our natural strength, by destroying more of our people than can well be spared, and which, if preserved, might improve our country, and augment our power; and lastly, to the use of spirituous liquors, by which numbers have been and are daily lost. But there may be easy remedies for two of those evils, by a little attention of the Legislature; which would greatly conduce to the public happiness.

And thus, Sir, I have wrote this third Letter to you, upon a very uncommon subject: but I hope the importance of it will plead my excuse. And if I have discovered any thing that has not been known, and that may be useful in our speculations upon Government, I shall think my time and pains have

not been misapplied; but if I have been mistaken, your usual goodness will, I trust, forgive

Your most affectionate

Sion College,  
Nov. 25, 1756.

and faithful servant,

Wm. Brakenridge.

*P. S.* Since the above was written, I have been certainly informed, that from the survey lately made of the window lights, after the year 1750, there are about 690,000 houses charged to that Tax in England and Wales, besides cottages that pay nothing. And though the number of cottages is not accurately known, it appears from the accounts given in, that they cannot amount to above 200,000. And therefore there are not in England and Wales more than 890,000 houses, or 5,340,000 people, allowing six to a house; which well agrees with what I have said in this and my former letter, and corroborates the whole of my reasoning. For if the survey made before the year 1710 was near the truth, from which it appeared, that there was not above 729,048 houses, besides cottages, or 929,048 houses in the whole; which will make about 5,570,000 people; then there must have been no increment since that time, but rather a decrease, notwithstanding the continual supplies from Scotland and Ireland, and from Foreigners.

I beg leave likewise to mention, that I find some people have objected to the Bills of Mor-

tality, from which I computed our numbers in London and Westminster, in my first Letter; That they are too uncertain to found any calculations upon; that sometimes in the weekly Bills there are omissions of some of the largest Parishes, and perhaps in the yearly Bills. To which it is answered. If there are omissions sometimes in the weekly Bills, these are afterwards supplied in the subsequent weeks, and at the end of the year the whole account to each parish is made up, as accurately as the circumstances will allow; so that upon the whole it is presumed, the yearly Bills are done in such manner, that they may be depended upon; for otherwise they would be a vile imposition upon the Publick. And if they are properly taken care of, they may be considered as the index of the health and numbers of the people, as they are in other cities in Europe; in which view they have always had some credit, for a century past, and been attended to as of some importance; and many ingenious men have deduced useful speculations from them. But if it should be allowed, that there are inaccuracies in them, it cannot reasonably be supposed, that there are more now than ever have been; for there is as much care taken of them lately as ever.

The argument then from which I inferred, that there is a decrease of the inhabitants within the Bills is this; That, before the year 1743, for twenty years, the burials in them were at an average above 27,000, and the baptisms between 15,000 and 17,000; but since that time they are both gradually decreased; so that now the  
burials

burials are about 22,000, and the baptisms between 14,000 and 15,000, taken at an average for ten years: And therefore these different numbers, continued so long, cannot come from the same number of people; but that as the burials and baptisms are both decreased, the whole people must be also diminished. This seems to be fair reasoning, if the Bills are true. The times were as healthy before the year 1743, as ever since; there were as many burials carried out into the country before that time as afterwards; and there were as many Dissenters to lessen the number of burials and baptisms before that time as ever after. What then is to be concluded, the circumstances being the same, but that there must be a diminution of the people? And this may be imperceptibly made; either by the increase of celibacy, or by fewer coming annually to reside in Town than formerly, and more retiring from it; which last case I consider rather as an advantage to the kingdom, as it may tend to the improvement of the country.

It is true, we do not see so great an increase of empty houses, that may answer to the decrease in the Bills; but it may be easily imagined, that some hundreds of families may be diminished, and not one house left empty. The one half of our people consist of Lodgers, Inmates, and Children; and therefore there may be a great decrease of these, and yet not many more houses empty: Though it is also to be considered, that there are much fewer houses now within the Liberties of the city, than were before 1743; many being built in place of two or three, or more, and warehouses

houses made of others. I know some Parishes, in which they have lost one tenth of their number, by this means, since that time; so that within the walls I find there is above double the number lost, that I mentioned in my Letter. To live in large houses is now a part of our luxury. But if there be an increase of houses in Paddington, Mary le bone, &c. without the Bills of Mortality, this does not affect my argument; which was only to shew, that there was a decrease of the people within them; and surely such a small increment is not to be compared to the probable decrease on the whole.

In that first Letter I reasoned, and made my calculation, upon the same principles with Sir William Petty, Mr. Graunt, and other approved Authors. From a continued increase in the Bills they inferred, that there must be a proportional increase of inhabitants; and I from the continued decrease in them, in the same circumstances, have endeavoured to prove a similar decrease of people. If their reasoning is just, mine cannot be false; and if the Bills never again appear so high, as formerly for a continuance, in healthy times, it will be a demonstration.